

Enhance Operational Safety, Security, and Surveillance in Airports

Airport operations are complex — the vast size of facilities, need for combining secure and public access, safety protocols against threats, and high volumes of cargo and luggage make for a dynamic environment. Cameras and advanced video analytics are critical infrastructure elements that simplify the complexity and ensure control for airport operations stakeholders. Continuous monitoring aids airport personnel in maintaining calm and in taking rapid action against any threats or operational problems.

Ipsotek is a pioneer in the field of Artificial Intelligence Video Analytics (A.I.V.A). In a new partnership, Ipsotek, Arrow, and NVIDIA are bringing to market an advanced airport surveillance platform that is versatile, accurate, self-calibrating, and easy to configure for large-scale deployments. Ipsotek's VISuite AI provides the fusion of AI and its patented Scenario-based Rule Engine (SBRE) algorithms to provide advanced analytics capabilities for airport operators. The platform can monitor large networks of cameras, track objects in real-time, and generate rich metadata unique to each object in the scene. VISuite AI delivers real-time alerts for rapid decisions and actions by combining AI and Video Analytics. This highly scalable platform enables up to 32 SBRE rules to be applied to each IP camera channel to cover a range of operational requirements. The solution offers applications like 'Perimeter Protection', 'Queue Measurement', and 'Social Distancing' which are available as standard in the perpetual software license. Using the platform, stakeholders can efficiently manage alarms in real-time, reducing operator response times and improving operational efficiency.

Ipsotek Airport Management Solution Stack Components

Ipsotek

- VISuite AI is based on Ipsotek's patented Scenario-based rule engine and fuses robust Video Analytics algorithms with accurate and versatile Artificial Intelligence Deep Learning Detectors

NVIDIA

- NVIDIA Metropolis platform with pre-trained models, transfer learning toolkit, and DeepStream SDK
- EGX GPU hardware Jetson, Quadro, Tesla®

Arrow Intelligent Solutions

- **Solutions:** Tiers of products designed specifically for analytics applications
- **Solution range:** Embedded, workstation, and rack mount form factors
- **Product services:** Design, support, or professional services
- **Manufacturing services:** Supply chain, integration, and logistics

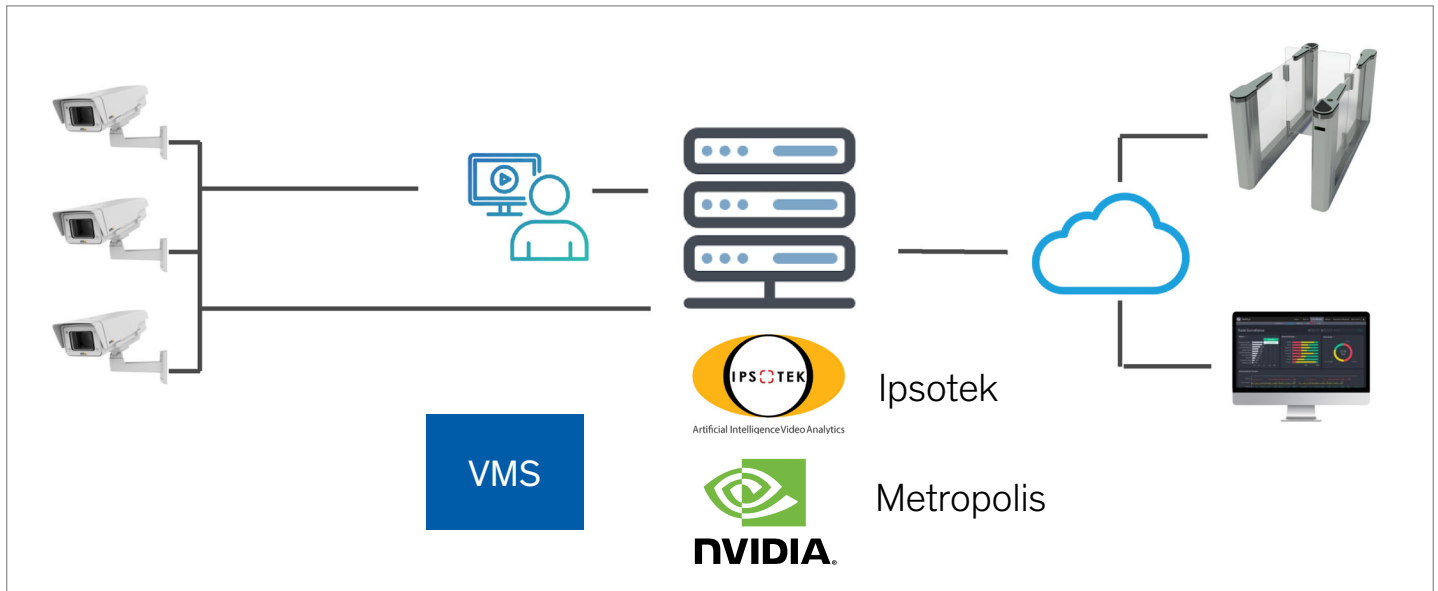
Automate and Enhance Airport Surveillance Through AI Video Analytics

- | | | |
|-------------------------------|------------------------------|---------------------------------------|
| – Perimeter protection | – Abandoned object detection | – Access control for restricted areas |
| – Abandoned vehicle detection | – Crowd counting | – Queue measurement |
| – Baggage line intrusion | – Vehicle tracking | – Social distancing |
| – Occupancy calculation | – Traffic monitoring | |



Solution Components

The comprehensive video analytics aviation solution consists of Ipsotek's VISuite AI that runs on NVIDIA Tesla® GPUs and is typically integrated with the VMS. Tesla® GPUs with TensorRT™ platform, the world's fastest, and most efficient inference platform, supports all deep learning workloads — combining the highest throughput and best efficiency to deliver intelligent video analytics in a challenging airport environment.



Typical Solution Architecture

Use Cases



Improve Security



Maintain Safety



Improve Operations



Monitor Traffic



Collect Data

Company Profile

Established in 2001, Ipsotek is a pioneer in the field of Artificial Intelligence (AI), Scenario-based Intelligent Video Analytics, Face Recognition (FR) and License Plate Recognition (LPR) solutions for mission-critical applications. Their aviation solutions have been successfully deployed across thousands of cameras in more than 70 airport projects around the world winning the trust and approval of airport operators, airlines, transportation authorities, and government Ministries of Interior.

In partnership with:



Via Email

IntelligentSolutions@arrow.com

Online

arrow.com/AIS



twitter.com/arw_services

[linkedin.com/showcase/
arrow-intelligent-solutions](https://linkedin.com/showcase/arrow-intelligent-solutions)

01_11_2021